



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

*[Handwritten signature]*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,749	10/20/2000	Sandrine Decoster	05725.0782-00000	7073
22852	7590	05/19/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			YU, GINA C	
		ART UNIT	PAPER NUMBER	
			1617	

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/692,749	DECOSTER ET AL.	
	Examiner Gina C. Yu	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 04 March 2004.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-112 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-112 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- (A) Claims 1-31, 38 – 67, and 94-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle et al. (EP 0874017 A2) ("Dalle") in view of Dubief et al. (U.S.

Art Unit: 1617

Pat. No. 5,650,383) ("Dubief ('383)") and Restle et al. (U.S. Pat. No. 6,039,936) ("Restle").

Dalle teaches silicone- in- water emulsions comprising the polysiloxanes of formula (I) and at least one surfactant among anionic, nonionic, amphoteric, and cationic surfactants. The use of the emulsion in hair or skin washing of treatment applications is also disclosed. See p. 5, lines 47 – 57; instant claims 96-108. The reference teaches using 9 parts by weight of polysiloxane in making the silicone-in-water emulsion. See Examples 1-3 on p. 6; instant claims 13 and 14. Examiner views that the dimethylvinylsiloxy terminated polydimethylsiloxanes used in Examples 1-3 meets instant claim 110. The particle size of the silicone copolymer is said to be in the range of 0.3 – 100 µm. See p. 5, lines 35-41. See instant claims 15-16. Formulating the composition with additives including perfume, polymers and moisturizing agents is disclosed. See p. 4, line 57- p. 5, line 1; p. 6, lines 2- 4; instant claim 94. Dalle et al. teaches the use of quaternary ammonium hydroxides and their corresponding salts in formulating the silicone-in-water emulsion. See p. 4, lines 26 – 37; instant claims 41-67. The reference teaches that the invention is applicable either in hair shampoo or conditioning composition. See p. 5, lines 51-52. See instant claims 111 and 112.

Dalle fails to teach additionally using the insoluble silicones as recited in the instant claims.

Dubief ('383) teaches composition for washing and rinsing hair, which comprise water-insoluble silicone in an aqueous medium and surfactants. The polyorganosiloxanes in claims 15 – 31and 38 are disclosed in col. 2, line 66 – col. 6, line

Art Unit: 1617

8. polydimethylsiloxanes are particularly mentioned. See col. 3, lines 46 –61; instant claim 109. The use of the silicone in the amount of 0.1 – 30% by weight is also disclosed, which meets claims 39 and 40, col. 6 lines 5 – 9. The reference teaches that using silicones in hair washing composition is well known. See col. 1, lines 21-24. Silicones are said to provide shine, softness, and lightness on hair.

Restle et al. teach an oil-in-water emulsion comprising a silicone surfactant and at least one cationic amphiphilic lipid that is a quaternary ammonium salt of formulas (IV) – (VII) and their constituents in the instant claims 41 - 67. See col. 2, line 59 –col. 6, line 38. Using 1-60% of the cationic amphiphilic lipids by weight is also disclosed, which meets claims 65 – 67. See col. 6, lines 42 – 50. The reference teaches that the composition, when used in hair treatment products, renders the hair softness and gloss without a greasy feel or appearance, and disentangles easily. See col. 1, lines 24 – 48.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of Dalle by adding an additional silicone disclosed in Dubief, as motivated by the teaching therein, because of the expectation to have successfully produced hair care composition that enhances shine, softness, lightness and disentanglement of hair. It would also have been obvious to the skilled artisan to have added the quaternary ammonium salt, as motivated by Restle et al., because of the expectation to have successfully produced a hair care composition which leaves the hair soft and gloss with no greasy feel or appearances and disentangles the hair easily.

All components are known in the art. Nothing unexpected or nonobvious is seen in combining old and well-known compounds for the same use.

(B) Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Dubief ('383), and Restle, as applied to claims 1-31, 38-67, 94-112 above, and further in view of Grollier et al. (U.S. Pat. No. 5,063,051) ("Grollier").

Dalle, Dubief ('383), and Grollier are discussed above. The combined references fail to teach the polysiloxanes in claim 32.

Grollier et al. ('051) disclose a cosmetic hair treatment composition comprising a polyorganosiloxane containing a hydroalkyl functional group of formula (IX) of the instant claim 32 and its constituents. See abstract. The reference teaches that the composition, in its application on hair, enhances shine, lightness, and volume. See col. 1, lines 22 – 26.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the polyorganosiloxane of formula (IX), as motivated by Grollier, because of the expectation to have successfully produced a hair treatment composition that provides shine, lightness, and volume to the hair.

(C) Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Dubief, Restle, and Grollier ('051) as applied to claims 1-32, 38-67, 94-112 above, and further in view of Grollier et al. (U.S. Pat. No. 4,957,732) ("Grollier ('732)").

Dalle, Dubief ('383), Restle, and Grollier ('051) are discussed above. The combined references lack the teaching of using the polyorganosiloxane of claim 33.

Grollier ('732) describe shaving composition comprising polyorgano-siloxane of formula (X) and in claim 33 and its constituents. See col. 1, line 54 – col. 2, line 25. The reference teaches that the use of the polyorganosiloxanes in the invention exhibited substantial improvement to be obtained in the smoothness and softness of these compositions, preserves the quality and stability of the composition while emptying from aerosol container, and easy rinsing of hair with water, and leaving skin clean and satiny. See col. 1, lines 28 – 45.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the polyorganosiloxane disclosed in Grollier ('732), as motivated by Grollier ('732), because of the expectation to have successfully produced an aerosol hair care or shaving composition that is smooth in feel and easy to rinse, retains the quality and stability while being dispensed from the container, and leaves the skin clean and satiny.

(D) Claim 34 - 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Dubief ('383), Restle, Grollier ('051), and ('732) as applied to claims 1-33, 38-67, and 94-112 above, and further in view of Dubief et al. (U.S. Pat. No. 6,011,126) ("Dubief ('126").

Dalle, Dubief ('383), Restle, Grollier ('051), and ('732), discussed above, fail to teach the grafted polymer of instant claims 34-37.

Dubief ('126) discloses a cosmetic composition for hair treatment, which comprises a polymer grafted with a non-silicone organic skeleton grafted with polysiloxane monomers, or polysiloxane polymer grafted with non-silicone organic

monomers, which meets claims 34 and 35. See abstract. The polysiloxane macromers of formula (X) in the instant claim 36 are disclosed in col. 4, lines 16 – 33. Claim 37 is rejected by the disclosure in col. 6, line 66 – col. 7, line 8. The reference teaches that the use of these polymers in hair product enhances the styling properties, col. 1, lines 30 - 40.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the grafted polysiloxane polymer in Dubief ('126), as motivated by the teaching therein, because of the expectation to have successfully produced a hair care composition with enhanced hair styling properties.

(E) Claims 68-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle, Restle, Dubief ('383), ('126), Grollier ('051), and ('732), as applied to claims 1-67 and 94-112 above, and further in view of Inman (U.S. Pat. No. 5,948,739).

Dalle, Restle, Dubief ('383), ('126), Grollier ('051), and ('732) are discussed above. While Dubief ('383) teaches to use the detergents surface-active agents of instant claims, the combined references do not provide combining the surface-active agents.

Inman teaches aqueous hair conditioning shampoo compositions that contain silicone conditioning agent and a detergents surfactant component, which is a combination of anionic surfactant and amphoteric, zwitterionic, or other non-ionic surfactants. See col. 2, lines 31 – 61; col. 3, lines 1 – 17. The anionic surfactants of instant claims 68 – 79 are disclosed in col. 4, line 11 – col. 6, line 14. The nonionic surfactants of claims 70-83 are described in col. 6, line 14 - col. 8, line 44. The

amphoteric surfactants of claims 84 – 88 and 91 – 93 are described in col. 8, line 46 - col. 11, line 20. Claims 89 – 91 are met by the disclosure in col. 11, lines 21 – 28.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the composition of the combined references by adding the surfactants as taught by Inman because of the expectation to have successfully produced a hair conditioning shampoo composition with a good cleaning property.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 and 41-104 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-83 of copending application no. 09/692360; claims 1-95 of copending application no. 09/692155; claims 1-16, 37-104 of copending application no. 09/692716. Although the conflicting claims are not identical, they are not patentably distinct from each other

because each set of claims is directed to hair care composition comprising silicone copolymers, cationic surfactants, and additional surfactants of identical formulas.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments and declaration filed on March 4, 2004 have been fully considered but they do not place the application in allowable condition.

Applicants assert that the combined references fail to provide motivation to combine the Dubief insoluble silicone with the Dalle polyorganosiloxane emulsion. Applicants' argument that Dubief teaches away from using silicone that are insoluble in the mixture is unpersuasive because the Dubief invention itself employs water-insoluble silicones. Since Dubief teaches using insoluble silicones which do not affect the stability of the composition, one of ordinary skill would have also found a motivation to employ the Dalle silicone-in-water emulsion.

Applicants also argue that In re Kerkhoven is not applicable in the present case. Examiner respectfully disagrees, since both Dalle and Dubief inventions teach ingredients that are used in hair care compositions. As in In re Kerkhoven, one of ordinary skill in the art would have been motivated to add the ingredients of Dalle and Dubief to make the known hair care compositions such as shampoo and conditioner. While applicants assert that the present invention is specifically a conditioner, examiner respectfully disagrees and points out that Claim 1 is directed to a composition in general. Nonetheless both Dalle and Dubief teach shampoo and conditioning

compositions, therefore under the holding in In re Kerkhoven, there is nothing nonobvious in mixing shampoo or conditioner ingredients to make a third composition that is used for the same purpose.

Examiner also disagrees with applicants' argument that there is no reasonable expectation of success in combining the references. Both references are analogous arts, as they are both directed to shampoo and conditioner compositions. Given the specific formulas shown in Dubief, and the specific teaching in Dalle to make shampoo or conditioner with the silicone copolymer emulsion, examiner takes the position that a skilled artisan has reasonable expectation of success in combining the teachings of these references.

The declaration filed on March 4, 2004 has been considered, but does not place the application in an allowable condition. Applicants state in the declaration that the comparison data shows Composition A which comprises the Dalle silicone copolymer emulsion (DC200 Fluid-60,000CS from Dow Corning) and an additional insoluble silicone, and Composition B "as cited in the prior art" and a soluble silicone (Abilquat 3434 from Goldschmidt). Examiner views that the declaration is unpersuasive firstly because the data insufficiently shows the actual compositions used in the testing: the formulation table does not show how much or what insoluble silicone was actually used. See p. 3. Was the Dubief insoluble silicone used in Composition A? Furthermore, assuming that same "insoluble silicone" were used in both Compositions A and B, the resulting data shows that treatment with the composition comprising the Dalle silicone emulsion produces better disentangling than the treatment with the other composition

which comprises Abilquat 3434. As examiner maintains the position that the combination of the prior arts establishes a *prima facie* obviousness, examiner further takes the position that the 22 % improvement which is assessed by a subjective opinion does not amount to a surprising or unexpected, greater than expected results in view of the strong teachings of the references. Dalle clearly teaches that its silicone emulsion provides "lubricious" property if used in skin cosmetics and "improved conditioning benefits" when used in hair compositions. Examiner asserts that given this specific teachings, the hair distangling properties seen in the testing applicants conducted is expected by one of ordinary skill in the art. Examiner is not convinced that the comparison result shows any unexpected or surprising result of combining the Dalle silicone emulsion with an insoluble silicone. Rather, the observed result is seen as an expected outcome of using Dalle invention in a shampoo/conditioning composition as taught by the reference.

***Conclusion***

No claims are allowed.

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

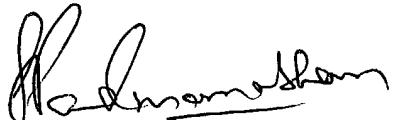
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 703-308-3951.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 703-305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

308-4242 for regular communications and 703-308-4242 for After Final  
communications.

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the receptionist whose telephone number is 703-308-  
1234.

Gina Yu  
Patent examiner



SREENI PADMANABHAN  
SUPERVISORY PATENT EXAMINER